PATIENT SAFETY CULTURE AND PATIENT SAFETY IMPLEMENTATION IN STELLA MARIS HOSPITAL DURING NATIONAL HEALTH INSURANCE ERA

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Patient Safety Culture and Patient Safety Implementation in Stella Maris Hospital during National Health Insurance Era

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ABSTRACT

Implementation of patient safety in hospital is influenced by several factors such as culture of patient safety. The aim of the research was to analyze the effect of patient safety culture on the implementation of patient safety in Stella Maris Hospital in 2016. The research was a quantitative studyusinganalytic operationaldesign withcross-sectional approach. The samples consisted of 234people selected using proportional stratified random sampling technique. The results of the research indicate that there are variables of patient safety culture which does not affect the implementation of patient safety. The variables which do not have effect in intensive care unit are supervisor's expectation and action to promote patient safety (p=0.819). Emergency units which do not have effect are organizational learning and continual improvement (p=0.469). Inpatient installations which do not have effect are staffing (p=0.778) and outpatient installation nonpunitive response of error (p=0.511). Surgery room which does not have effect is unit teamwork (p=0.839). Pharmacy installation which does not have effect is staffing (p=0.656). Laboratory installations which do not have effect are organizational learning and continual improvement (p=0.829). Radiology installation which does not have effect is management support on patient safety (p=0.133), while the variables which do not have effect in hemodialysis are organizational learning and continual improvement (p=0.443).

Keywords : *patient safety culture, patient safety implementation*

INTRODUCTION

The Government of the Republic of Indonesia in January 2014 perform a transformation of the health system in Indonesia to begin convening of the National Health Insurance program (JKN). The National Health Insurance is a government program that is contained in the program of the program National Social Security System (SJSN) and it is an implementation of Universal Health Coverage. National Health Insurance (JKN) program aims to guarantee health care benefits and financial protection benefits for its participans.

Implementation of National Health Insurance (JKN) program organized by Social Security Agency (BPJS) require cooperating with various health facilitie, one of which is the hospital. Hopital in cooperation with Social Security Agency must meet the quality standard or hospital accreditation standard. Therefore, health services to participans JKN need to focus on service quality, patient safety oriented, effectiveness of action, and based on patient needs (President Decree Number 12 in 2013).

Implementation of National Health Insurance (JKN) program by Social Security Agency (BPJS) in hospital bring concequences both from the aspect of financing and quality of care. The existing system requires health workers in hospitals in order to improve efficiency in service. Several studies have shown that dissatisfaction occurs in a hospital doctor who implement JKN (Meutiah and Ishak, 2015).

Patient safety in the hospital became a serious global issue. Since the launch of patient safety programs by WHO in 2004, currently around 140 countries struggle with the challenge of unsafe services (WHO, 2014). Emerging and developing patient safety along with the increasing number of patient safety incidents. Patient safety and focus efforts on reducing the number of patient safety incidents are preventable (Raleigh, 2009). Figures patient safety incidents reported by various negara.Tahun 2006 study conducted by the World Health Organization (WHO), Eastern Mediterranean and African Regions (EMRO and AFRO), and the WHO Patient Safety in 8 developing countries. The result keselamatanpasien incident occurred in 2.5% -18.4% of the 15 548 medical records at 26 hospitals, 83% were preventable, 30% were related to patient deaths and 34% related to therapeutic errors in clinical situations were relatively complex. In addition, WHO also reported on a study of 58 hospitals in Argentina, Colombia, Costa Rica, Mexico and Peru by IBEAS (The Latin American Study of Adverse Events) and involving 11 379 inpatients. The result is a 10% admission experienced patient safety incidents caused by the service kesehatan.Insiden patient safety.

Patient Safety Organization (PSO) in 2014 reported more than 27,000 events from 110 health organizations in California, USA, 94% or 25,380 were incidents of patient accidents. Occurrence of accidents due to harm in patients by 27% or 6,852. Severe accident incidence or death of 1.2% or 304. While the incidence of almost injury and unsafe conditions amounted to 6% (1620).

Incidence of the above are also found in Indonesia. In 2007, The Hospital Patient Safety Committee (KKPRS) reported patient safety incidents as many 145 incidents. Other data regarding patient safety incidents in Indonesia showed that near miss (KNC) more reported than adverse event (KTD).

One of the hospitals has a high patient safety incident rate in the city of Makassar was Stella Maris Hospital. The number of patient safety incidents incidents that is patients fell as much as 2 cases, 3 cases, 5 cases, and 1 case. Dispensing errors by as much as 5 cases, 9 cases, and 8 cases. Nosocomial infections as much as 1.5%, 8.4%, 6.9% and 5.6%. The incident happened in the range of years 2012-2015.

Patient safety incidents can be reduced or prevented what happened by knowing the factors that contribute to patient safety incidence. It has previously been presented that patient safety program is a program that is working to reduce and prevent the patient safety incidents. In addition to being influenced by the implementation of patient safety program, patient safety incidents can also be influenced by several factors. WHO (2009), in the Human Factors in Patient Safety: a Review of Topics and Tools bring up several factors that affect patient safety incidents. WHO developed the four categories of strongly factors relate to the cause of patient safety incidents, namely individual factors, team work factors, organization and management factors and environmental factors. Henriksen (2008) also explains that patient safety incidents is influenced by factors such as the individual's abilities, experience, work fatigue. Factors such as the complexity of the work nature of the treatment, the flow of work, interruptions. Physical environmental factors include lighting, temperature. Management factors such as cultural safety, employee development, leadership. In addition, external factors such as technological development organizations, policy related government health services was also mentioned as a factor that could affect patient safety incidents. Implementation of patient safety programs more effective compared to other factors in reducing the incidence rate of patient safety.

In The Patient Safety Handbook, Behal (2004) explains that the successful implementation of patient safety program by staff at the hospital can be affected by several

components. One such component is a culture of patient safety. Research Nygren et al (2013), indicates that the patient safety culture be a contributing factor in improving patient safety. Patient safety culture would encourage reporting of incidents and eliminate the habit blame when patient safety incident. A similar study conducted by Coughan (2013), the research results show that a key component of patient safety culture that is leadership, collaboration, and learning from mistakes contributes greatly to patient safety.

Patient Safety Goals consists of six goals, the accuracy of patient identification, increase effective communication, improving the safety of drugs that need to watch (high alert), the certainty of the right location, proper procedures, and appropriate patients for surgery, the reduction of risk of infection related to health care, and reduction the risk of falling.

Based on data from patient safety incidents in Stella Maris Hospital and the research that has been described above, the researcher interested in conducting research to analyze the patient safety culture and implementation of patient safety goals (IPSG) at the Stella Maris Hospital in National Health Insurance (JKN) Era.

MATERIALS AND METHODS

The research was conducted at the Stella Maris Hospital Makassar. The study was observational analytic research with cross sectional design. The study population was the hospital staff in the installation service. Sampling technique with proportional stratified random sampling technique with a sample size of 234 respondent.

Data collected in the study are primary data and secondary data. Primary data taken through questionnaires, while secondary data or supporting data obtained from the relevant sections. Descriptive data analysis, aims to describe the characteristics of the sample and are presented in the form of a frequency distribution. Bivariate analysis, to see the relationship between the independent variable on the dependent variable. While the multivariate analyzes were performed to obtain information about the influence of the independent variables together of several independent variables on dependent variables. Presentation of data in tabular form and accompanied by narration.

RESULT

1. Characteristics of Respondents

Table 1. Distribution Characteristics of Respondents Research at Stella Maris Hospital Makassar, in 2016

Characteristics of Respondents	Frequency	Percent (%)
Age (years)		
17-25	52	22.2
26-35	137	58.5
36-45	38	16.2
46-55	7	3.0
Total	**234**	**100**
Gender		
Man	72	30.8
Woman	162	69.2
Total	**234**	**100**
Level of education		
High school	17	7.3
D3 Equal	113	48.3
S1	102	43.6
S2	2	0.9
Total	**234**	**100**
Profession Respondents		
Doctor	11	4.7
Nurse	177	75.6
Pharmacist	22	9.4
Laboratory assistant	14	6.0
Radiographers	10	4.3
Total	**234**	**100**

Table 1 shows the characteristics of the respondents were dominated by 26-35 year age group and mostly female. D3 education level is equal to the profession most were nurses.

2. The Influence of The Independent and Dependent Variables

The results of the bivariate analysis between the variables of organizational culture that consists of 12 dimensions with variable implementation of patient safety show that of the 12 dimensions of patient safety culture, there are only 4 dimensions related to the implementation of patient safety. The results can be seen in the following table:

Table 2. Results of Analysis Relationship Between the Dimensions of Patient Safety with the Implementation of Patient Safety in Stella Maris Hospital Makassar, in 2016

Independent Variables (Patient Safety Culture)	Patient Safety Implementation	
	r	p
Supervisor/Manager Expectations & Actions Promoting Safety	0.051	0.440
Organizational Learning—Continuous Improvement	**0.176**	**0.007**
Teamwork Within Unit	**0.145**	**0.027**
Communication Openness	-.040	0.539
Feedback and Communication About Error	0.108	0.101
Nonpunitive Response to Error	**0.146**	**0.025**
Staffing	-.040	0.542
Hospital Management Support for Patient Safety	0.124	0.059
Teamwork Across Hospital Units	-.034	0.604
Hospital Handoffs and Transitions	0.076	0.247
Overall Perceptions of Safety	-.004	0.956
Frequency of Event Reporting	**0.160**	**0.014**

Table 2 shows that the cultural dimensions of patient safety is an ongoing organizational learning and continuous improvement had a significant association with the implementation of the safety of the patients (p = 0.007). Dimensional teamwork within unit also has a significant relationship with the implementation of patient safety with p = 0.027. Two other dimensions which will nonpunitive response error and frequency of event reporting also had a significant association with the implementation of patient safety with a p-value of each ie, p = 0.025 and p = 0.014. While eight other dimensions do not have a significant relationship with the implementation of patient safety.

Then performed multivariate analysis to determine the dimensions of patient safety culture that has the greatest affect to implementation of patient safety. The results can be seen in the following table:

Table 3. Multivariate Analysis of the Dimensions of Patient Safety and the Implementation of Patient Safety in Stella Maris Hospital Makassar, in 2016

Dimensions of Patient Safety Culture	Exp (B)
Organizational Learning—Continuous Improvement	1.583
Teamwork Within Unit	1.413
Nonpunitive Response to Error	1.229
Frequency of Event Reporting	1.397

Table 3 shows that of the four dimensions of patient safety culture relating to the implementation of the patient safety, then the most influential dimensions are organizational learning and continuous improvement with Exp (B) $ 1,583 and the lowest is non-punitive response to error.

DISCUSSION

This study showed that there are only four dimensions of patient safety culture implementation affecting the safety of patients, while eight other variables have no effect. The dimensions of patient safety culture that influence the organizational learning and continuous improvement, teamwork within unit, response nonpunitive to error and frequency of event reporting.

1) The Influence Dimensions of Organizational Learning and Continuous Improvement to Implementation of Patient Safety

Garvin (2000) defines organizational learning as a membership organization to create, acquire, interpret, transfer and sharing of knowledge, which is aimed at modifying its behavior to describe the knowledge and insights. Another notion mentioned that the learning organization is an opportunity given to employees so that the organization becomes more efficient (Luthans, 1995). Organizational learning is based on the basic principles of learning that receive and gather information, interpret it, and act upon the interpretation of such information (Garvin, 2000). Learning organization presents the principles and the foundations that enable organizations to learn. Organizational learning can also be described as a set of organizational behavior that demonstrates a commitment to learning and continuous improvement.

Organizational learning and continuous improvement is willingness of health workers to learn and perform the activities regarding patient safety such as socializing, discussions, and evaluating patient safety procedures. Organizational learning and continuous improvement also means that mistakes or errors that occur in hospitals becomes the origin in the positive changes made by the hospital, the change will be evaluated in order to know how effective in resolving issues related to patient safety incidents (AHRQ, 2004).

Organizational learning and continuous improvement in patient safety errors made in an effort to become better. Seen on the dimensions of organizational learning in the form of activeness in improving patient safety, always make a mistake to change for the better and the desire to do the evaluation of the error. Implementation of organizational learning and continuous improvement is considered to be good at Stella Maris Hospital. Especially in the dissemination of patient safety. Each officer must get the socialization, than that every new employee must obtain dissemination of patient safety. In this case it can be said that organizational learning has a major role in shaping the organizational culture, especially the culture of patient safety. Research on organizational learning is done by Maktabi & Khazaei (2014), which indicates that organizational learning has a positive influence on the organization's ability to innovate and the performance of the organization itself. In addition a similar study also conducted by Nafei (2015), the research results show the direct influence of organizational learning on organizational performance. So it is advisable for organizations to pay more attention to organizational learning. research results show a direct effect of organizational learning on organizational performance. So it is advisable for organizations to pay more attention to organizational learning. research results show a direct effect of organizational learning on organizational performance. So it is advisable for organizations to pay more attention to organizational learning.

2. The Influence Dimension of Teamwork Within Unit to Implementation of Patient Safety

Teamwork within unit is mutual help, support, respect, and reminiscent in carrying out the work by the individual in the work unit to implement patient safety programs in order to avoid patient safety incidents. Teamwork within unit at the Stella Maris Hospital has been running well. In installations of the research found that the officers would be willing to assist other officers in the installation if you have a tough job. Besides the clerk did not hesitate to remind the other officers to carry out the service process in accordance with the applicable SPO. So that every officer will carry out services that support patient safety.

Teamwork within unit is required in the implementation of patient safety. The safety culture is high because of the good cooperation in the patient's safety unit. According to Baker et al., (2005) team work is needed by officers to improve patient safety through mutual error. Cooperation in the unit is also related to communication between officers in the unit. For example on pharmaceutical installations, communication between physicians and pharmacists is very important. Physician and pharmacist work is actually complementary (complementary), hypothetically it can be said that the cooperation can have a positive effect on patient outcome (outcome of patient). A collaboration between physicians and pharmacists includes, for example, tracing a complete and accurate history of drug information, prescription-based prescriptions; Early detection of prescription drugs, increasing cost-effectiveness in prescribing drugs, increasing knowledge and skills of each side for patient satisfaction. Unoptimal collaboration can benefit patients. Oral drug delivery is not adjusted to the pharmacokinetic properties of drugs that can lead to decreased drugs.

Patient safety is a team effort, the most effective teams have the same goal in work, and their teamwork is not efektif creating various opportunities for errors (Merry & Brown, 2002; White, 2004). Research conducted by Sorbero et. al., (2008) showed that good cooperation in the ICU will affect the lower mortality and length of stay of patients in the ICU. Studies show that 70% of medical errors can be reduced through the interaction between the teams at the plant hospital. Patient safety experts agree that communication and cooperation factor in other units such as mutual support and help to prevent and reduce medical errors. The Joint Commission International (2011) underlines that it is important to promote cooperation in the unit behavior and improve communication among officers that are useful to prevent the occurrence of errors.

3. The Influences Dimension of Response Non-punitive to Error to the Implementation of Patient Safety

Response non-punitive to errors was the attitude of not blaming individuals when conducting and reporting the incident for the improvement of patient safety program. Characteristics of reporting the incident to the hospital patient safety team has several characteristics. The characteristics that are not punish or blame, confidential, independent, expert anaysis, timely, orientation systems, and responsive. The first characteristic is to be not punish or blame, which means that the complainant free of fear and retaliation or punishment as a result of the report. It is important to note, because since there are many hospitals that culture is not to blame in case of error and reported it has not gone well.

In this era where patient safety became mandatory in hospitals, blaming culture should be transformed into a just culture. Just culture is a condition where the staff at the hospital is open and motivated to provide information on what can or can not be accepted, their fear when the staff report error events, the cooperation between the members of the staff. Wachter and Pronovost in the New England Journal of Medicine even called no-blame approach as the easiest tool to improve patient safety by reducing error at the hospital. However Khatri et al., (2009) actually found that the hospital is still difficult to move from just blame culture to culture.

Atmosphere working environment still blame culture can reduce working motivation of health workers. They tend to be lazy to innovate in doing its job, because they think if done wrong will have a negative impact on him. Especially if the blame cultureini stressful job. Officers feel pressured in their duties.

Stress is a state of a person under stress conditions due to the conditions that affect it, such conditions can be obtained from within oneself and the environment outside of oneself. Stress can cause a negative effect on psychological and biological situation for employees. According to Robbins (2002) stress is a dynamic condition in which an individual is faced with opportunities, limitations or demands in accordance with the expectations of the results that he wants to accomplish in critical condition and erratic. Gitosudarmo and Suditta (1997), that stress has positive and negative effects. The positive impact of stress at a low level to a moderate level functional in the sense of acting as drivers of employee performance improvement. Research conducted by Khasawneh & Futa (2013) showed that work stress caused by environmental organizations can affect the performance of the individual hospital. From this study it can be concluded that the blame culture can broadly affect the performance of health workers in hospitals.

4) The Influence Dimensions of Frequency of Event Reporting to Implementation of Patient Safety

Patient safety system generally consists of several components such as incident reporting system, analysis of learning and research of incidents arising, development and implementation of solutions to pressing errors and adverse event (KTD), and the determination of a variety of patient safety standards based on knowledge and research. Errorberkaitan event reporting with the evaluation of the safety of the patient. If considered patient safety programs have not been effective in reducing or eliminating the error it is

necessary to repair and development of patient safety programs. Patient safety event reporting is actually a form of support for the implementation of patient safety itself.

Incident reporting is a system for documenting patient safety incident reporting, analysis, and solutions for learning. Incident reporting system is done internally in the hospital and external to the Hospital Patient Safety Committee (KKP-RS). Internal patient safety incident report is reporting in writing any potential condition of injuries and incidents that happened to the patient, family visitors, and employees that occur in hospitals. External patient safety incident report KKP-RS. Reporting anonymously and in writing to KKP-RS every potential condition of injuries and patient safety incident that occurs in patients and has analyzed the cause of, and solution recommendations. Incident reporting aims to reduce the incidence and correcting the system in order to improve patient safety. Each incident must be reported internally to TKPRS later than 2 × 24 hours according to the report format. TKPRS do the analysis and provide recommendations and solutions on reported incidents and report the results of their activities to the head of the hospital.

The hospital shall develop incident reporting system. Moreover Hospital Patient Safety Committee (KKP-RS) has established guidelines for reporting of patient safety incidents. One of the seven steps to patient safety also is developing a reporting system. Even the output of patient safety is a culture of reporting events that have occurred. But in reality the problem of error in the health care system reflects the iceberg, because of the generally adverse events detected were found by chance alone. Most of the others are likely not reported, not recorded, or even escape our attention.

Iskandar (2014) found that the causes of the low reporting of patient safety incidents due to the persistence of cultural *blame* when reporting the incident or made a mistake, lack of knowledge about reporting the incident, the reluctance to report for lacking commitment from management or related units, no reward from the hospital if the report and the lack of activity in the hospital patient safety committee (KKP-RS).

The study by Gunawan (2015) also showed that the factors causing low report patient safety incidents caused by fear on the head unit. Incident reporting and komitmenyang require high involvement of organizations and individual caregivers (The Health Foundation, 2011). Not only officers as service providers but also of the hospital management. Caregivers should be open in reporting the incident, the hospital management to provide workflow and reporting guidelines, forming a team of hospital patient safety (TKP-RS). Especially develop

no blame when reporting and making mistakes. Regulation of Health Minister Number 1691 in 2011 on the Patient Safety Hospital one of which is communication.

CONCLUSIONS

There were four dimensions of patient safety that affect the implementation of patient safety. The demands of quality services, especially in the era of national health insurance is reached target expects quality control and cost control have not been fully achieved. Dimensional teamwork within unit is the most influential dimension pelaksaaan patient safety.

Stella Maris Hospital expected to further improve patient safety culture, as some variables of patient safety culture at the plant is still relatively moderate category. Besides implementing a no blame culture so that the workers are not afraid in reporting the incident and develop training programs on patient safety to health workers. With the enactment of JKN the demands of effectiveness and efficiency increase hospital services should be achieved, one of them by improving safety culture and implementation pasiem safery patient in the hospital.

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